

Figure 1. PL image of as-grown defects in CZ Si

Scan area 1mm x 1mm

-----

Figure 2. PL image of as-grown defects in CZ Si after Fe contamination  $1 \times 10^{11}$  atoms/cm<sup>2</sup>

Scan area 1mm x 1mm

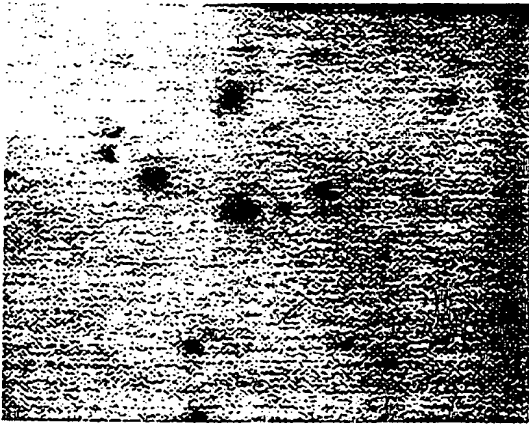


Figure 3. PL image of oxygen precipitates in annealed Si

Scan area 1mm x 1mm

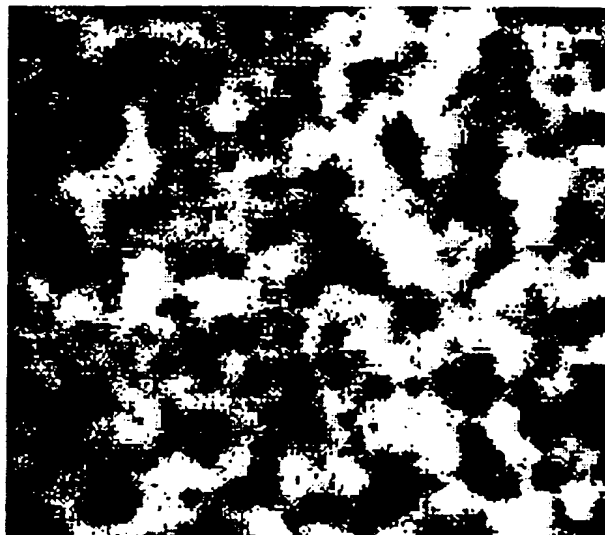


Figure 4. PL image of Ni silicide precipitates in CMOS processed test wafer

Scan area 500 x 500  $\mu\text{m}$



Figure 5. PL image of Cu silicide precipitates in CMOS processed test wafer

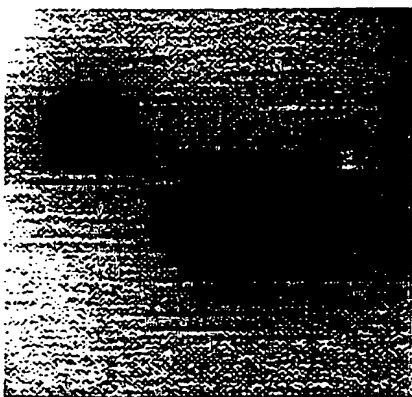
Scan area 100 x 100  $\mu\text{m}$



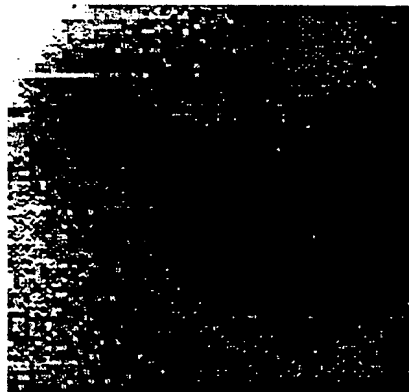
Figure 6. PL image of Cu silicide precipitates in CMOS processed test wafer, a) high injection, b) low injection.

Scan area 37 x 39  $\mu\text{m}$

a)

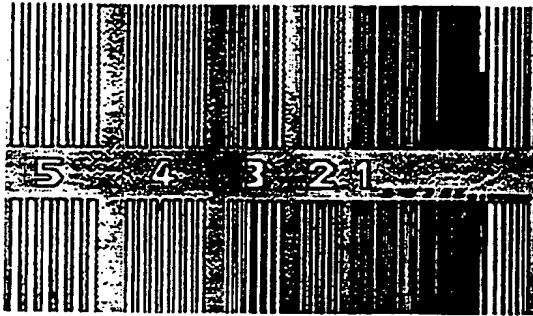


b)



**Figure 7. Micrograph of LOCOS test structure**

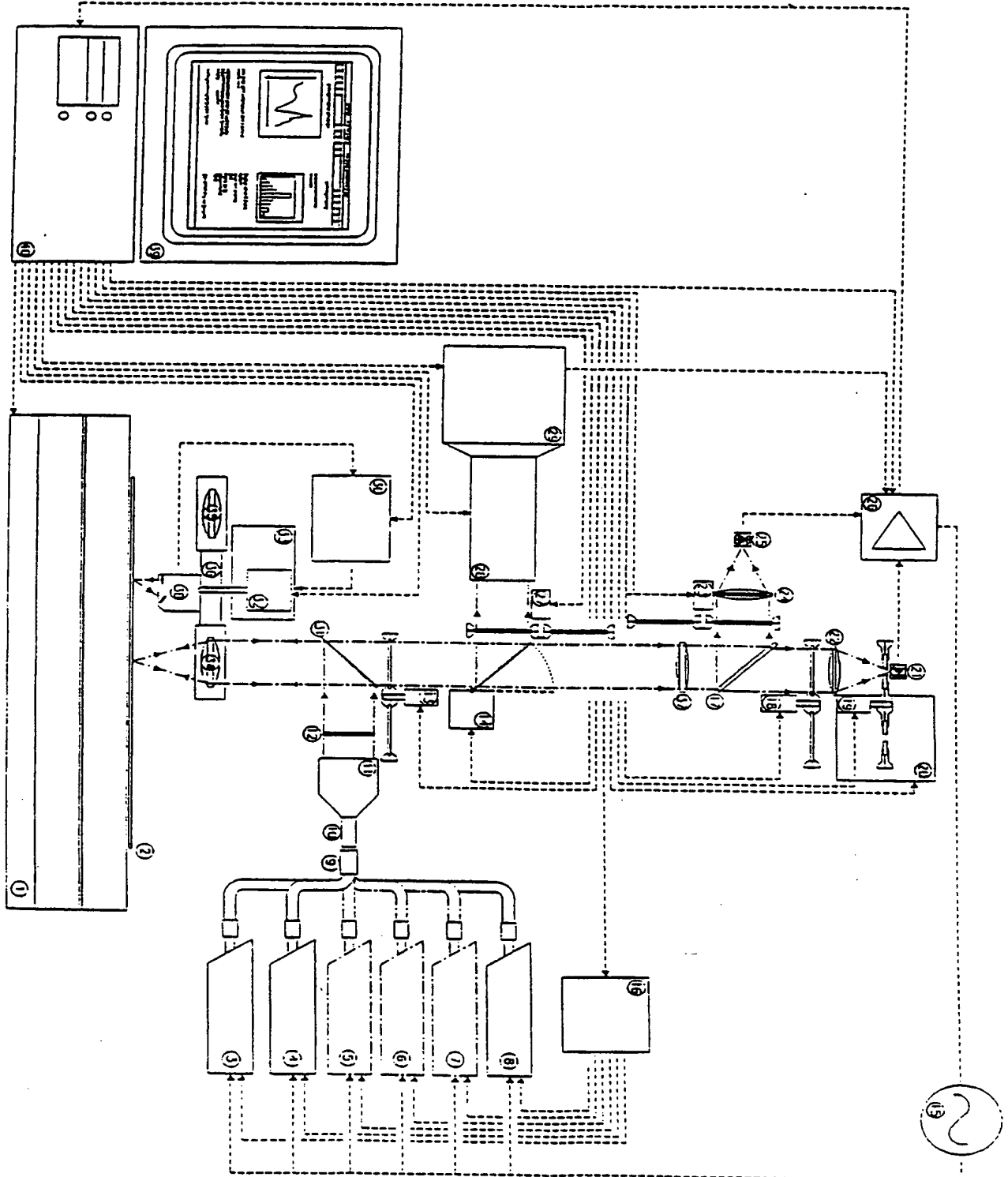
Scan area 120 x 60  $\mu\text{m}$



**Figure 8. PL image of LOCOS test structure revealing a high density of dislocations**

Scan area 120 x 60  $\mu\text{m}$



[illegible]